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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/787,072	02/24/2004	Alan M. Ganz	AG-001US (PAR)	2994

7590 03/13/2007
David Aker
23 Southern Road
Hartsdale, NY 10530

EXAMINER

PUNNOOSE, ROY M

ART UNIT	PAPER NUMBER
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2886

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/13/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/787,072

Applicant(s)

GANZ ET AL.

Examiner

Roy M. Punnoose

Art Unit

2886

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 and 21-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 and 21-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 December 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendments

1. The amendment filed by the applicant on 12/01/2006 in response to the Ex-Parte Quayle office action of 09/25/2006 is acknowledged and has been entered into the records. The applicant has canceled claim 20. Claims 1-19 and 21-33 are currently pending in the application.
2. In the process of conducting a final search, the Examiner has discovered new prior art relevant to the applicant's claimed invention, which is the subject of this office action. In view of the newly discovered prior art, the Examiner has withdrawn and voided the section on the "allowable subject matter" of the previous office action.

Drawings

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "12" and "14" have both been used to designate "spectrometer and/or detector." According to newly submitted Figure 1A, the label "spectrometer and/or detector" is assigned to reference numeral 12 and 14. This is confusing. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1-4, 7, 11-17, 21-24, 26 and 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rodrigues et al (US_6,917,424 B2).**

6. Claims 1, 16 and 17 are rejected because:

- A. Rodrigues et al (Rodrigues hereinafter) teaches of a method for evaluating one or more materials in accordance with size of particles therein (see col.2, lines 23-25), comprising: evaluating a spectrum of light (see col.2, lines 16-18) transmitted from a first group of particles such as a known standard (see col.8, lines 36-38), evaluating a spectrum of light transmitted from a second group of particle comparing results of said evaluating of said first group with results of said evaluating of said second group, and providing an indication of a state of said material when said comparing produces a predetermined comparison result (see col.8, lines 33-38).
- B. As indicated above, Rodrigues uses spectral content of light transmitted through a sample material contrasted with applicant's use of spectral content of light reflected from a sample material to provide an indication of the state of the sample material from the

Art Unit: 2886

particle size in the sample material in a manufacturing process (see col. 2, line 27, and col. 3, lines 15-17).

C. In view of Rodrigues' use of *spectral content* of light *transmitted* through a sample material, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use *spectral content* of light reflected from a sample material because the crux of Rodrigues's and the applicant's invention is to measure the *spectral content of light from a sample material*, and not if it is transmitted or reflected light, to provide an indication of the state of the sample material from the particle size in the sample material in a manufacturing process.

7. Claims 2 and 3 are rejected for the same reasons of rejection of claim 1 above and because with Rodrigues' teaching that a measured sample is compared with a known standard (see col.8, lines 36-38), it is obvious to one of ordinary skill in the art that the measurements are not made simultaneously, but sequentially, meaning that sample material with a first group of particles are evaluated first to create a known standard, and, sample material with a second group of particles are evaluated at a later time and compared with the results of the first evaluation to provide an indication of the state of the process during the process (see col. 2, line 27, col. 3, lines 15-17, col. 5, lines 15-25).

8. Claim 4 is rejected for the same reasons of rejection of claims 1 and 2 above and because with Rodrigues' teaching that a measured sample is compared with a known standard (see col.8, lines 36-38), it is obvious to one of ordinary skill in the art that a reference sample may be evaluated at a time other than during the process.

Art Unit: 2886

9. Claim 7 is rejected for the same reasons of rejection of claims 1 above and because Rodrigues teaches that the particles are in a liquid, said particles are solid particles (see col.2, line 38 and col.3, line 61 – col.4, line 36).

10. Claim 11 is rejected for the same reasons of rejection of claims 1 above and because in view of Rodrigues' teaching of determining compositional characteristics and particle size (see col.8, lines 36-38), formulating various compositions (see col.6, lines 43-47), and the use of spectrophotometer for spectral analysis of a sample material (see col.4, lines 43-51), it would have been obvious to one of ordinary skill in the art at the time the invention was made to determine any other characteristics such as chemical composition to provide an indication of the state of the sample material in a manufacturing process.

11. Claims 12 and 13 are rejected for the same reasons of rejection of claim 1 above and because Rodrigues teaches of successive groups of particles in a batch of particles undergoing a process of mixing, and said evaluating of said particles is performed at different times (see col.3, line 61– col.4, line 36 and Figure 1).

12. Claim 14 is rejected for the same reasons of rejection of claims 1, 12 and 13 above and because obtaining an indication of homogeneity of particles is an intended result of the mixing. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In the instant case, Rodrigues teaches of mixing the sample material (see col.4, line 9-11 and Figure 1), which will obviously result in homogeneity of the particles.

Art Unit: 2886

13. Claim 15 is rejected for the same reasons of rejection of claim 1 above and because determining authenticity of a product, and determining quality of a product, without providing any method steps, is a very subjective statement and does not carry any patentable weight. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. Additionally, Rodrigues teaches of monitoring (see col.5, lines 43-45) of a process to provide an indication of the state of the sample material in a manufacturing process.
14. Claim 21 is rejected for the same reasons of rejection of claim 1 above because it is directed to an apparatus to carry out the method steps of claim 1 and the limitations of claim 21 are similar to that of claim 1.
15. Claim 22 is rejected for the same reasons of rejection of claim 2 above because it is directed to an apparatus to carry out the method steps of claim 2 and the limitations of claim 22 are similar to that of claim 2.
16. Claim 23 is rejected for the same reasons of rejection of claim 3 above.
17. Claim 24 is rejected for the same reasons of rejection of claim 4 above.
18. Claim 26 is rejected for the same reasons of rejection of claim 21 above and because Rodrigues teaches of a means 26 (see Figure 1) for containing the liquid in which the particles are dispersed.
19. Claims 31-33 are rejected for the same reasons of rejection of claim 21 above and because Rodrigues teaches of a flow cell 16 (see Figure 1) through which a mixture containing

Art Unit: 2886

said particles flows in order to have measurements performed thereon, wherein said flow cell is positioned to evaluate materials during a process (see col.4, lines 1-5).

20. Claims 5-6, 8-10, 18-19, 25, and 27-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rodrigues et al (US_6,917,424 B2) in view of Kennedy et al (US_4,969,741).

21. Claims 5-6, 8-10, 18-19, 25, and 27-30 are rejected because:

- A. Rodrigues teach all claim limitations except a first light conductor for conducting light to particles and a second light conductor for conducting light from said particles for evaluating spectra of light received from said particles to provide an indication of the state of the sample material in a manufacturing process.
- B. Kennedy et al (Kennedy hereinafter) teach of a first light conductor for conducting light to particles and a second light conductor for conducting light from said particles for evaluating spectra of light received from said particles (see col.6, lines 13-39 and Figure 1) to provide an indication of the state of the sample material in a manufacturing process.
- C. In view of Kennedy's use of a first light conductor for conducting light to particles and a second light conductor for conducting light from said particles for evaluating spectra of light received from said particles, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate it into Rodrigues' method and apparatus due to the fact that the distance between the probes can be varied to obtain the optimum signal while minimizing any spurious noise, for providing an indication of the state of the sample material from the particle size in the sample material in a manufacturing process.

Art Unit: 2886

Contact/Status Information

22. The prior art cited in the accompanying PTO-892 is made of record and not relied upon, is considered pertinent to applicant's disclosure.

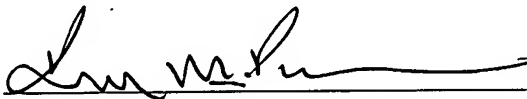
23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Roy M. Punnoose** whose telephone number is **571-272-2427**.

The examiner can normally be reached on 9:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Tarifur Chowdhury** can be reached on **571-272-2800 ext.86**. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

March 05, 2007


Roy M. Punnoose
Patent Examiner
Art Unit 2886